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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,670	10/31/2003	Ruth E. Leibig	2003P12088US	3568

7590 06/10/2009
Siemens Corporation
Attn: Elsa Keller, Legal Administrator
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

RAMIREZ, JOHN FERNANDO

ART UNIT	PAPER NUMBER
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3737

MAIL DATE	DELIVERY MODE
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06/10/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/698,670	Applicant(s) LEIBIG ET AL.	
	Examiner JOHN F. RAMIREZ	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/02/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-37, 39-45, 47 and 48 is/are allowed.
- 6) ☒ Claim(s) 1, 4-10, 12, 14-28 and 46 is/are rejected.
- 7) ☒ Claim(s) 2, 11 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>03/02/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed on March 2, 2009 with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

As argued in the previous office action, Hsieh teaches inter alia re-acquiring an ultrasound image set or subset (e.g. col. 2 lines 40-44) which is understood to pertain to a re-do based on events which may be non-cyclic (see col. 1 top portion), and this occurs as a result of computer-assisted analysis.

Claim Rejections - 35 USC § 112

Claims 1 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure fails to specify the step to select a portion "less than" all of the ultrasound examination as claimed now.

Furthermore, the phrases "non-selected portions of the ultrasound examination including ultrasound image data sets after the one or more distinguished events" and "portions of the ultrasound examination after at least one pair of the one or more pairs of distinguished events not being marked or stored" are considered to be new matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4-10, 12, 14-28 and 46 as amended are again rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh et al (US6574304) in view of McDonald (US5920317).

Since Hsieh which is directed to a system and method CAD detection or recognition of a medical event (col. 5 line 55) from a medical image in order to automatically obtain further images and the further storage of specialized subsets of image data it is argued that such a non-temporal event be it an infarction, occurrence of a metastasis by image brightness change or gradient, lung infection, would generally be a non-cyclic event (although certain medical events e.g. lung collapse or heart valve

Art Unit: 3737

prolapse detectable e.g. by Doppler jetting might have cyclic salients), and in the context of suggested ultrasound imaging modality use (col. 1 line 24), serves to trigger acquisition of a subset of images as in Fig. 7 whose acquisition is bracketed by pairs of distinguishing start/stop events indicating lesion characterizing sufficiency of e.g. resolution. Under this circumstance the CAD processor is fairly characterizable as an event recognition processor and image subsets (82,88,92,98) stored into memory 38 by a succession of start/stop marking or tagging may be considered to be marked or tagged according to the imaging parameters (meaning decimation for zoom, increased gain, beam resolution or such) under which they were obtained. The CAD process per se is an event and/or image characterization and the retaining is characterizable as a single retention state. Feedback would have been inherently obvious since the system operator must be made to know when the session must progress or may be terminated. activity may be during the imaging session or during workstation operations.

As argued in the previous office action, Hsieh teaches *inter alia* re-acquiring an ultrasound image set or subset (e.g. col. 2 lines 40-44) which is understood to pertain to a re-do based on events which may be non-cyclic (see col. 1 top portion), and this occurs as a result of computer-assisted analysis.

Hsieh does not teach that the images are part of a rolling stream of a series of ultrasound image data. However, in the same field of endeavor, McDonald teaches a system for recording and displaying ultrasound images. McDonald teaches that if the sonographer observes a scanned image sequence of particular interest while moving an ultrasound transducer over a patient's body in a particular way, the sonographer will

Art Unit: 3737

select the "start cine" button to create a start cine annotation record and repeat the movement of the transducer to capture the sequence for the physician who will review the recorded scan (Table II, col.7, lines 20-60). The recorded sequence is automatically saved in the system for latter review and non-selected portions of the ultrasound examination including ultrasound image data sets after the one or more distinguished events as well.

It would have been obvious to modify the system disclosed by Hsieh with the stream annotation ultrasound system as taught by McDonald in order to greatly facilitate the review of ultrasound scans by physicians (col. 8, lines 38-43).

Allowable Subject Matter

Claims 29-37, 39-45 and 47-48 are allowed.

Claims 2, 11 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on March 2, 2009, prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN F. RAMIREZ whose telephone number is (571)272-8685. The examiner can normally be reached on (Mon-Fri) 7:00 - 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3737

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRIAN CASLER/
Supervisory Patent Examiner, Art
Unit 3737

/J. F. R./
Examiner, Art Unit 3737